



DEPARTMENT OF COMPUTER SCIENCE

Reg No.: _____	Quiz 05 – Spring 2023	Date: 05/06/2023
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Program	BSE	Class & Sec	5A
Course Name	CSC462 – Artificial Intelligence	Duration	15 mins
Instructor's Name	Mr. Hafiz Syed Ahmed Qasim	Total Marks	10
Applicable CLO	CLO-5	Obtained Marks	

Q1. Perform Classical Planning to find one plan

(10)

Initial state:

Robot position: (2, 2)

Goal State:

Robot position: (5, 6)

Actions:

Move up, Move down, Move left, Move right

Constraints:

Grid world size: 8x8

The robot cannot move outside the grid world.

The robot cannot move into obstacles (blocked cells).

Plan:

1. Move right (current position: (3, 2))
2. Move right (current position: (4, 2))
3. Move up (current position: (4, 3))
4. Move up (current position: (4, 4))
5. Move up (current position: (4, 5))
6. Move right (current position: (5, 5))
7. Move right (current position: (6, 5))
8. Move right (current position: (7, 5))
9. Move down (current position: (7, 6))
10. Move down (current position: (7, 7))
11. Move left (current position: (6, 7))
12. Move left (current position: (5, 7))
13. Move down (current position: (5, 6)) - Goal reached!